

Notice of Allowability

Application No.

10/815,934

Examiner

Brook Kebede

Applicant(s)

TAKYU ET AL.

Art Unit

2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to terminal disclaimer filed on December 6, 2005.
2. ☒ The allowed claim(s) is/are 2,3,12 and 13.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Brook Kebede
BROOK KEBEDE
PRIMARY EXAMINER

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on December 6, 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Application No. 10/808,298 has been reviewed and is accepted. The terminal disclaimer has been recorded.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Richard V. Burgujian on January 19, 2006.

3. The application has been amended as follows:

In the Claims:

In Claim 3, line 20, change "this sealing" to --~~the~~ sealing--.

In Claim 13, line 22, change "this sealing" to --~~the~~ sealing--.

Allowable Subject Matter

4. Claims 2, 3, 12 and 13 allowed over prior art of record.

Reasons for Allowance

5. The following is an examiner's statement of reasons for allowance:

The instant application claimed invention is allowed in view of the Terminal Disclaimer filed on December 6, 2005. In addition, the prior art of record neither anticipates nor renders obvious the claimed subject matter of the instant application as a whole either taken alone or in combination, in particular, prior art of record does not teach “fixing the semiconductor wafer onto the porous member by sucking the semiconductor wafer with at least two systems of suction paths in association with the sucking areas in the direction in which the PSA tape is peeled off; and when the PSA tape is peeled off along the peeling direction and part of the PSA tape is peeled off in one of the sucking areas adjacent to each other, switching the suction paths therebetween in the vicinity of the other adjacent sucking area which the peeling of the PSA tape approaches so as to suck the semiconductor wafer, thereby fixing the semiconductor wafer onto the porous member in the other sucking area, the adhesive layer is cut in parallel with a control for switch between the at least two or more systems of suction paths in response to the state in-which the adhesive layer is cut,” as recited in claim 2, “wherein the semiconductor wafer has a sealing resin formed on the first surface, and a low dielectric constant insulation film formed in contact with the sealing resin; the PSA tape is adhesively bonded onto the first surface of the semiconductor wafer via the sealing resin and the low dielectric constant insulation film; and the method further comprises fusing at least part of the low dielectric constant insulation film and the sealing resin so as to fix the low dielectric constant insulation film on the sealing resin,” as recited in claim 3, “wafer with at least two systems of suction paths in association with the sucking areas in the direction in which the PSA tape is peeled off; and when the PSA tape is peeled off along the peeling direction and part of the PSA tape is peeled off in one of the sucking areas adjacent to each other, switching the suction paths therebetween in the vicinity of the other adjacent sucking area which the peeling of the PSA tape approaches so as to suck the semiconductor wafer, thereby fixing the

Art Unit: 2823

semiconductor wafer onto the porous member in the other sucking area, the adhesive layer is cut in parallel with a control, for switch between the at least two or-more systems of suction paths in response to the state in which the adhesive layer is cut,” as recited in claim 12, and “wherein the semiconductor wafer has a sealing resin formed on the first surface, and a low dielectric constant insulation film formed in contact with the sealing resin; the PSA tape is adhesively bonded onto the first surface of the semiconductor wafer via the sealing resin and the low dielectric constant insulation film; and the method further comprises fusing at least part of the low dielectric constant insulation film and the sealing resin so as to fix the low dielectric constant insulation film on the sealing resin,” as recited in claim 13 respectively.

Conclusion

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Correspondence

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brook Kebede whose telephone number is (571) 272-1862. The examiner can normally be reached on 8-5 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Matthew S. Smith can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2823

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Brook Kebede
Primary Examiner
Art Unit 2823

BK
January 19, 2006